Participant Questionnaire

Participant number: __16__   Date: __7/4/23__

Location: __Brescia, IT__

HRC Study / Algorithms tested: __HAMP, STAP- PPF__

Study Conducted by: __Jared Flowers__

Participant link lengths/dimensions: (**meters**, "spine" is pelvis to shoulder midpoint, "shoulders" is shoulder to shoulder)

Spine		Left Upper Arm	.3	Right Upper Arm	.28
Neck		Left Forearm	.28	Right Forearm	.27
Shoulders	.28				

Participant joint diameter: (**meters**)

Left Elbow	.105	Right Elbow	.11
Left Wrist	.07	Right Wrist	.068

Questions:

A. How safe did you feel? (0 is not safe at all, 5 is neutral, 10 is very safe)

B. Do you think the robot hindered your motions during the task? (0 is robot completely prevented your motions, 5 is neutral, 10 is robot did not impede you motion)

C. Did the robot perform logical motions? (0 is robot motions made no sense to you, 5 is neutral, 10 is robot motions made sense to you)

D. What is your overall satisfaction with the HRC task? (0 is you would not work in this HRC cell again, 5 is neutral, 10 is you enjoyed working in this cell with the robot)

For Task 1 (engine parts): (circle your answer to each question)

Task 1, Method 1:   3

Question A: (0 is not safe at all, 5 is neutral, 10 is very safe)

0	1	2	3	4	5	6	7	8	**9**	10

Question B: (0 is robot completely prevented your motions, 5 is neutral, 10 is robot did not impede you motion)

0	1	2	3	4	5	6	7	8	9	**10**

Question C: (0 is robot motions made no sense to you, 5 is neutral, 10 is robot motions made sense to you)

0	1	2	3	4	5	6	7	8	**9**	10

Question D: (0 is you would not work in this HRC cell again, 5 is neutral, 10 is you enjoyed working in this cell with the robot)

0	1	2	3	4	5	**6**	7	8	9	10

Task 1, Method 2:   2

Question A: (0 is not safe at all, 5 is neutral, 10 is very safe)

0	1	2	3	4	5	6	7	**8**	9	10

Question B: (0 is robot completely prevented your motions, 5 is neutral, 10 is robot did not impede you motion)

0	1	2	3	4	5	6	7	8	9	**10**

Question C: (0 is robot motions made no sense to you, 5 is neutral, 10 is robot motions made sense to you)

0	1	2	3	4	**5**	6	7	8	9	10

Question D: (0 is you would not work in this HRC cell again, 5 is neutral, 10 is you enjoyed working in this cell with the robot)

0	1	2	3	4	5	6	7	**8**	9	10

Task 1, Method 3:   1

Question A: (0 is not safe at all, 5 is neutral, 10 is very safe)

0	1	2	3	4	5	6	7	8	**9**	10

Question B: (0 is robot completely prevented your motions, 5 is neutral, 10 is robot did not impede you motion)

0	1	2	3	4	5	6	7	8	9	**10**

Question C: (0 is robot motions made no sense to you, 5 is neutral, 10 is robot motions made sense to you)

0	1	2	3	4	**5**	6	7	8	9	10

Question D: (0 is you would not work in this HRC cell again, 5 is neutral, 10 is you enjoyed working in this cell with the robot)

0	1	2	3	4	**5**	6	7	8	9	10

Comments: prefer more time at higher speed prefer compact robot configs away from person

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For Task 2 (Sharework parts: metal tabs, cylinders, pallets): (circle your answer to each question)

Task 2, Method 1:   *3*

Question A: (0 is not safe at all, 5 is neutral, 10 is very safe)

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | *8* | 9 | 10 |

Question B: (0 is robot completely prevented your motions, 5 is neutral, 10 is robot did not impede you motion)

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | *9* | 10 |

Question C: (0 is robot motions made no sense to you, 5 is neutral, 10 is robot motions made sense to you)

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | *7* | 8 | 9 | 10 |

Question D: (0 is you would not work in this HRC cell again, 5 is neutral, 10 is you enjoyed working in this cell with the robot)

| 0 | 1 | 2 | 3 | 4 | 5 | *6* | 7 | 8 | 9 | 10 |

Task 2, Method 2:   *2*

Question A: (0 is not safe at all, 5 is neutral, 10 is very safe)

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | *9* | 10 |

Question B: (0 is robot completely prevented your motions, 5 is neutral, 10 is robot did not impede you motion)

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | *8* | 9 | 10 |

Question C: (0 is robot motions made no sense to you, 5 is neutral, 10 is robot motions made sense to you)

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | *8* | 9 | 10 |

Question D: (0 is you would not work in this HRC cell again, 5 is neutral, 10 is you enjoyed working in this cell with the robot)

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | *8* | 9 | 10 |

Task 2, Method 3:   *1*

Question A: (0 is not safe at all, 5 is neutral, 10 is very safe)

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | *7* | 8 | 9 | 10 |

Question B: (0 is robot completely prevented your motions, 5 is neutral, 10 is robot did not impede you motion)

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | *9* | 10 |

Question C: (0 is robot motions made no sense to you, 5 is neutral, 10 is robot motions made sense to you)

| 0 | 1 | 2 | 3 | 4 | 5 | *6* | 7 | 8 | 9 | 10 |

Question D: (0 is you would not work in this HRC cell again, 5 is neutral, 10 is you enjoyed working in this cell with the robot)

| 0 | 1 | 2 | 3 | 4 | 5 | *6* | 7 | 8 | ·9 | 10 |

Comments: T2-m4: A _8_ B _9_ C _8_ D _8_

T2-m5: A _9_ B _10_ C _9_ D _9_

Experience: 10

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